What is claimed is:

CLAIMS

1. A method of reducing the peak-to-average power ratio (PAPR) of a modulated baseband signal, wherein the baseband signal is constituted by a waveform function modulated by information-carrying symbols transmitted in parallel.

2. The method of claim 1, including carrying out peak detection to detect peaks in the modulated baseband signal that exceed a threshold (*C*), and generating a pulse sequence signal (p[m]) therefrom.

3. The method of claim 2, including oversampling of the modulated baseband signal prior to the peak detection.

4. The method of claim 2, including application of a pulse sequence shaping to filter the pulse sequence signal in order to generate a peak-cancellation signal (c[m]).

5. The method of claim 3, including application of a pulse sequence shaping to filter the pulse sequence signal in order to generate a peak-cancellation signal (c[m]).

6. The method of claim 4, wherein the pulse sequence shaping is designed such that its pass-band is limited to the frequency-domain gap between the edge of the information-carrying frequency bandwidth of the modulated baseband signal and the edge of the channel's frequency band defined by the spectral mask specifying the maximum tolerable out-of-band emission.

7. The method of claim 5, wherein the pulse sequence shaping is designed such that its pass-band is limited to the frequency-domain gap between the edge of the information-carrying frequency bandwidth of the modulated baseband signal and the

edge of the channel's frequency band defined by the spectral mask specifying the maximum tolerable out-of-band emission.

8. The method of claim 4, wherein the peak-cancellation signal is subtracted from the modulated baseband signal to produce a reduced-PAPR modulated baseband signal ($\hat{s}'[m]$).

9. The method of claim 5, wherein the peak-cancellation signal is subtracted from the modulated baseband signal to produce a reduced-PAPR modulated baseband signal ($\hat{s}'[m]$).

10. A transmitter comprising:

a baseband signal generator for generating a digital baseband signal ($\check{s}[n]$) from an input data stream;

a digital-to-analogue converter for converting the digital baseband signal into an analogue baseband signal ($s[t]$) prior to output by a transmitter stage [TX];

an oversampling filter arranged between the baseband signal generator and digital-to-analogue converter for oversampling the digital baseband signal and thus generating an oversampled digital baseband signal ($\hat{s}[m]$);

a signal divider for splitting the oversampled digital baseband signal into first and second parts;

a peak detector arranged to receive the first part of the oversampled digital baseband signal as input and configured to output a pulse sequence signal ($p[m]$) containing a pulse for each peak in the oversampled digital baseband signal that exceeds a threshold level (C);

a pulse shaping filter for receiving the pulse sequence signal and converting it into a filtered clipping signal ($c[m]$); and

a signal combiner for subtracting the filtered clipping signal from the second part of the oversampled digital baseband signal so as to produce a digital baseband

signal (ŝ'[m]) with reduced PAPR which is routed to input into the digital-to-analogue converter for transmission by the transmitter (TX).

11. The transmitter of claim 10, wherein the pulses of the pulse sequence signal have a magnitude corresponding to the amount by which the peak concerned exceeds the threshold level (C).

12. The transmitter of claim 10, wherein the pulse shaping filter is a FIR filter.

13. The transmitter of claim 11, wherein the pulse shaping filter is a FIR filter.